CLAIMS:

1. Apparatus for encoding of a digital information signal, such as an n-channel digital audio signal, where n is an integer larger than 1, comprising

- input means for receiving the digital information signal,
- encoding means for encoding the digital information signal so as to obtain an encoded digital information signal, the encoding means being adapted to encode each of said channel signals of the n-channel digital audio signal so as to obtain an encoded channel signal for each of said channel signals in response to probability values for each of said channel signals,
- prediction filter means for carrying out a prediction filtering on each of said channel signals of the n-channel digital audio signal in response to a set of prediction filter coefficients for each of said channel signal so as to obtain a prediction filtered channel signal from each of said channel signals,
- prediction filter coefficient determining means for generating a set of prediction filter coefficients for each of said channel signals,
- probability value determining means for generating probability values for each of said channel signals in response to a probability table for each of said channel signals and the corresponding prediction filtered channel signal for each of said channel signals,
- probability table determining means for generating the probability tables for each of said channel signals,
- converting means for generating first mapping information and a plurality of m sets of prediction filter coefficients, where m is an integer for which holds $1 \leq m \leq n$, said first mapping information and m sets of prediction filter coefficients being representative of said n sets of prediction filter coefficients for said n channels, and for generating second mapping information and a plurality of p probability tables, where p is an integer for which holds $1 \leq p \leq n$, said second mapping information and p probability tables being representative of said n probability tables for said n channels,
- combining means for combining said compressed digital information signal, said first and second mapping information signals, said plurality of m sets of prediction filter coefficients and said plurality of p probability tables into a composite information signal,
- output means for outputting said composite information signal.

2. Apparatus for encoding of a digital information signal, such as an n-channel digital audio signal, where n is an integer larger than 1, comprising

- input means for receiving the digital information signal,
- encoding means for encoding the digital information signal so as to obtain an encoded digital information signal, the encoding means being adapted to encode time equivalent signal blocks of each of said channel signals of the n-channel digital audio signal by dividing the time equivalent signal blocks into M segments, and encoding the signal portions of the channel signals in all M segments in said time equivalent signal blocks, so as to obtain an encoded signal portion for each of said signal portions in said M segments in response to probability values for each of said signal portions, where $M = \sum_{i=0}^{i=n-1} sp_i$ and sp_i is the number of segments in the time equivalent signal block of the i-th channel signal,
- probability value determining means for generating probability values for each of said M signal portions in response to a probability table for each of said M signal portions,
- probability table determining means for generating the probability tables for each of said M signal portions,
- converting means for converting the information about the length and locations of the M segments in the n channel signals into first segment information, and for generating first mapping information and a plurality of m probability tables, where m is an integer for which holds $1 \leq m \leq M$, said first mapping information and said m probability tables being representative for said M probability tables,
- combining means for combining the portion of the encoded digital information signal comprised in said time equivalent signal blocks, said first segment information, said first mapping information signal and said plurality of m probability tables into a composite information signal,
- output means for outputting said composite information signal.

3. Apparatus as claimed in claim 2, further comprising

- prediction filter means for carrying out a prediction filtering on the digital information signal so as to obtain a prediction filtered digital information signal, the prediction filter means being adapted to prediction filter time equivalent signal blocks of each of said channel signals of the n-channel digital audio signal by dividing the time equivalent signal blocks into segments, and prediction filtering the signal portions of the channel signals in all P segments in said time

equivalent signal blocks, so as to obtain a prediction filtered signal portion for each of said P signal portions in response to a set of prediction filter coefficients for each of said signal portions, where $P = \sum_{i=0}^{i=n-1} sf_i$ and sf_i is the number of segments in the time equivalent signal block of the i-th channel signal,

- prediction filter coefficient determining means for generating a set of prediction filter coefficients for each of said P signal portions,
- the converting means further being adapted to convert the information about the length and locations of the P segments in the n channel signals into second segment information, and for generating second mapping information and a plurality of p sets of prediction filter coefficients, where p is an integer for which holds $1 \leq p \leq P$, said second mapping information and said p sets of prediction filter coefficients being representative of said P sets of prediction filter coefficients,
- the combining means further being adapted to combine said second segment information, said second mapping information signal and said plurality of p sets of prediction filter coefficients into said composite information signal.

4. Apparatus as claimed in claim 3, wherein the conversion means is adapted to generate a first indicator word (w_1) of a first value, indicating that the segmentation of the time equivalent signal blocks for the probability tables is different from the segmentation of the time equivalent signal blocks for the sets of prediction filter coefficients and of a second value indicating that the segmentation of the time equivalent signal blocks for the probability tables is the same as for the prediction filter coefficients, and for supplying only one of the first or the second segment information in the latter case, the combining means being adapted to combine the first indicator word and the only one of the first segment information or the second segment information into said composite information signal, in the case that the first indicator word has the second value.

5. Apparatus as claimed in claim 4, wherein the conversion means is adapted to generate said only one of the first or second segment information in the case that the first indicator word has the second value.

6. Apparatus as claimed in claim 3, wherein the conversion means is adapted to generate a second indicator word (w_2) of a third value indicating that the time equivalent

signal blocks all have the same segmentation for the sets of prediction filter coefficients and is adapted to generate a second indicator word of a fourth value indicating that the time equivalent signal blocks have each a different segmentation for the sets of prediction filter coefficients, that the converting means is adapted to generate second segment information for only one time equivalent signal block in the case that the second indicator word has the third value and is adapted to generate second segment information for each of the time equivalent signal blocks in the case that the second indicator word has the fourth value, and that the combining means is further adapted to combine the second indicator word into said composite information signal.

7. Apparatus as claimed in claim 2, wherein the conversion means is adapted to generate a third indicator word (w_3) of a fifth value indicating that the time equivalent signal blocks all have the same segmentation for the probability tables and is adapted to generate a third indicator word of a sixth value indicating that the time equivalent signal blocks have each a different segmentation for the probability tables, that the converting means is adapted to generate first segment information for only one time equivalent signal block in the case that the third indicator word has the fifth value and is adapted to generate first segment information for each of the time equivalent signal blocks in the case that the third indicator word has the sixth value, and that the combining means is further adapted to combine the third indicator word into said composite information signal.

8. Apparatus as claimed in claim 3, wherein the conversion means is adapted to generate a fourth indicator word (w_4) of a seventh value, indicating that the mapping information for the probability tables is different from the mapping information for the prediction filter coefficients and of an eighth value indicating that the mapping information for the probability tables is the same as for the prediction filter coefficients, and for supplying the first or the second mapping information only in the latter case, the combining means being adapted to combine the fourth indicator word and the first mapping information or the second mapping information only into said composite information signal, in the case that the fourth indicator word has the eighth value.

9. Apparatus as claimed in claim 3, wherein the conversion means is adapted to generate a fifth indicator word (w_5) of a ninth value indicating that the time equivalent signal blocks all have the same mapping information for the sets of prediction filter coefficients and

is adapted to generate a fifth indicator word of a tenth value indicating that the time equivalent signal blocks have each a different mapping information for the sets of prediction filter coefficients, that the converting means is adapted to generate second mapping information for only one time equivalent signal block in the case that the fifth indicator word has the ninth value and is adapted to generate second mapping information for each of the time equivalent signal blocks in the case that the fifth indicator word has the tenth value, and that the combining means is further adapted to combine the fifth indicator word into said composite information signal.

10. Apparatus as claimed in claim 2 or 3, the conversion means being further adapted to converting information concerning the number of segments in a time equivalent signal block of a channel signal into a number code, the combining means being further adapted to combine the number code into said composite information signal.

11. Apparatus as claimed in claim 10, wherein said number code satisfies the following table:

S	code(*S*)
1	1
2	01
3	001
4	0001
s	$0^{(s-1)}1$

where S is the number of segments in a time equivalent signal block of a channel signal.

12. Apparatus as claimed in claim 3, wherein the first set of prediction filter coefficients is allocated to the first of said P segments, said second mapping information being devoid of mapping information for mapping said first set of prediction filter coefficients to said first segment of said P segments,

(a) the first bit in said second mapping information indicating whether the set of prediction filter coefficients for the second segment is the first set of prediction filter coefficients or a second set of prediction filter coefficients,

(b1) if the first set of prediction filter coefficients is also the set of filter coefficients for the second segment, then the second bit in said second mapping information indicating whether the set of prediction filter coefficients for the third segment is the first set of prediction filter coefficients or the second set of prediction filter coefficients,

(b2) if the second set of prediction filter coefficients is the set of filter coefficients for the second segment, then the next two bits in the second mapping information indicating whether the set of prediction filter coefficients for the third segment is the first, the second or the third set of prediction filter coefficients,

(c1) if the first set of prediction filter coefficients is the set of filter coefficients for the second and third segment, then the third bit of said second mapping information indicates whether the set of prediction filter coefficients for the fourth segment is the first or the second set of prediction filter coefficients,

(c2) if the first set of prediction filter coefficients is the set of filter coefficients for the second segment and the second set of prediction filter coefficients is the set of filter coefficients for the third segment, then the third and fourth bit in said second mapping information indicating whether the set of prediction filter coefficients for the fourth segment is the first, the second or the third set of prediction filter coefficients,

(c3) if the second set of prediction filter coefficients is the set of filter coefficients for the second segment, and the first or the second set of filter coefficients is the set of filter coefficients for the third segment, then the fourth and fifth bit in the second mapping information indicating whether the set of prediction filter coefficients for the fourth segment is the first, second or the third set of prediction filter coefficients,

(c4) if the second set of prediction filter coefficients is the set of filter coefficients for the second segment, and the third set of filter coefficients is the set of prediction filter coefficients for the third segment, then the fourth and fifth bit in the second mapping information indicating whether the set of prediction filter coefficients for the fourth segment is the first, second, third or the fourth set of filter coefficients.

13. Apparatus as claimed in claim 2, wherein the first probability table is allocated to the first of said M segments, said first mapping information being devoid of mapping information for mapping said first probability table to said first segment of said M segments,

(a) the first bit in said first mapping information indicating whether the probability table for the second segment is the first probability table or a second probability table,

(b1) if the first probability table is also the probability table for the second segment, then the second bit in said first mapping information indicating whether the probability table for the third segment is the first probability table or the second probability table,

(b2) if the second probability table is the probability table for the second segment, then the next two bits in the first mapping information indicating whether the probability table for the third segment is the first, the second or the third probability table,

(c1) if the first probability table is the probability table for the second and third segment, then the third bit of said first mapping information indicates whether the probability table for the fourth segment is the first or the second probability table,

(c2) if the first probability table is the probability table for the second segment and the second probability table is the probability table for the third segment, then the third and fourth bit in said first mapping information indicating whether the probability table for the fourth segment is the first, the second or the third probability table,

(c3) if the second probability table is the probability table for the second segment, and the first or the second probability table is the probability table for the third segment, then the fourth and fifth bit in the first mapping information indicating whether the probability table for the fourth segment is the first, second or the third probability table,

(c4) if the second probability table is the probability table for the second segment, and the third probability table is the probability table for the third segment, then the fourth and fifth bit in the first mapping information indicating whether the probability table or the fourth segment is the first, second, third or the fourth probability table.

14. Apparatus as claimed in anyone of the preceding claims, characterized in that said output means comprises writing means for writing the composite information signal on a record carrier.

15. Apparatus as claimed in claim 14, characterized in that said output means further comprises channel encoding and/or error correction encoding means for carrying out a channel encoding step and/or an error correction encoding step on said composite information signal prior to writing the composite information signal on the record carrier.

16. Method for carrying out an encoding of a digital information signal, such as a digital audio signal, in an apparatus as claimed in anyone of the claims 1 to 15.

17. Methods as claimed in claim 16, further comprising the step of writing the composite information signal on a record carrier.

18. Record carrier comprising the composite information signal as generated by the apparatus as claimed in anyone of the claims 1 to 15, in a track on said record carrier.

19. Apparatus for decoding an encoded composite information signal comprising encoded data of an n-channel digital information signal, such as an n-channel digital audio signal, where n is an integer larger than 1, and side information having a relationship with said encoded digital information signal, the apparatus comprising

- input means for receiving a composite information signal,
- retrieval means for retrieving encoded data information and side information from said composite information signal,
- decoding means for decoding the encoded data information so as to obtain said n channel signals in response to a set of probability values for each of said channel signals,
- prediction filter means for carrying out a prediction filtering on each of said channel signals of the n-channel digital audio signal in response to n sets of prediction filter coefficients, one set for each of said channel signals, so as to obtain a prediction filtered channel signal from each of said channel signals, said sets of prediction filter coefficients being derived from said side information,
- probability value generator means for generating n sets of probability values, one for each of the channel signals in response to a corresponding prediction filtered channel signal and corresponding probability table, said n probability tables, one for each of the channel signals, being derived from said side information,
- the retrieval means further being adapted to retrieve first and second mapping information, a plurality of m sets of prediction filter coefficients and a plurality of p probability tables from said side information,
- reconverting means for reconverting said first mapping information and said m sets of prediction filter coefficients into n sets of prediction filter coefficients, one set for each of said channel signals, where m is an integer for which holds $1 \leq m \leq n$, and for reconverting said

second mapping information and said p probability tables into n probability tables, one set for each of said channel signals, where p is an integer for which holds $1 \leq p \leq n$,

- output means for outputting said n channel signals.

20. Apparatus for decoding an encoded composite information signal comprising encoded data of an n-channel digital information signal, such as an n-channel digital audio signal, where n is an integer larger than 1, and side information having a relationship with said encoded digital information signal, the apparatus comprising

- input means for receiving a composite information signal,
- retrieval means for retrieving encoded data information and side information from said composite information signal,
- decoding means for decoding the encoded data information into M signal portions in response to corresponding sets of probability values, one for each of said M signal portions, where $M = \sum_{i=0}^{i=n-1} sp_i$ and sp_i is the number of segments in the time equivalent signal block of the i-th channel signal,
- probability value generator means for generating M sets of probability values, one for each of the M signal portions in response to a corresponding probability table, said M probability tables, one for each of the signal portions, being derived from said side information,
- the retrieval means further being adapted to retrieve first segment information and first mapping information and a plurality of m probability tables from said side information, where m is an integer for which holds $1 \leq m \leq M$,
- reconverting means for reconverting said first mapping information and m probability tables into M probability tables, one for each of said signal portions, and for reconverting said first segment information into information about the length and locations of the M segments in the n channel signals so as to obtain time equivalent signal blocks in said n channel signals,
- output means for outputting the time equivalent signal blocks of said n channel signals.

21. Apparatus as claimed in claim 20, further comprising

- prediction filter means for carrying out a prediction filtering on said time equivalent signal blocks of each of said channel signals of the n-channel digital information signal by dividing the time equivalent signal blocks into segments, and prediction filtering the signal portions of the channel signals in all P segments in said time equivalent signal blocks and for all n channel signals, so as to obtain a prediction filtered signal portion for each of said P signal portions in

response to a set of prediction filter coefficients for each of said signal portions, where P = $\sum_{i=0}^{i=n-1} sf_i$ and sf_i is the number of segments in the time equivalent signal block of the i-th channel signal,

- the retrieval means further being adapted to retrieve second segment information, second mapping information and p sets of prediction filter coefficients from said side information, where p is an integer for which holds $1 \leq p \leq P$,
- the reconverting means further being adapted to reconvert the second segment information into information about the length and locations of the P segments in the n channel signals and for reconverting the p sets of prediction filter coefficients into P sets of prediction filter coefficients, one for each of said P signal portions, using said second mapping information.

22. Apparatus as claimed in claim 21, wherein the retrieval means are adapted to retrieve a first indicator word (w_1) from said side information, said first indicator word, when being of a first value, indicating that the segmentation of the time equivalent signal blocks for the probability tables is different from the segmentation of the time equivalent signal blocks for the prediction filter coefficients, and when being of a second value, indicating that the segmentation of the time equivalent signal blocks for the probability tables is the same as for the prediction filter coefficients, and for retrieving one segment information only from the side information in the latter case, the reconverting means further being adapted to copy the said segment information so as to obtain the first and second segment information, in the latter case.

23. Apparatus as claimed in claim 21, wherein the retrieval means is adapted to retrieve a second indicator word (w_2) from said side information, said second indicator word, when being of a third value, indicating that the time equivalent signal blocks all have the same segmentation for the prediction filter coefficients and, when being of a fourth value, indicating that the time equivalent signal blocks have each a different segmentation for the prediction filter coefficients, the retrieval means further being adapted to retrieve second segment information for only one time equivalent signal block from the side information in the case that the second indicator word has the third value and is adapted to retrieve second segment information for each of the time equivalent signal blocks in the case that the second indicator word has the fourth value, the reconverting means being further adapted to copy the second

segment information n-1 times so as to obtain the P segments of the time equivalent signal blocks of all n channel signals, in the case that the second indicator word has the third value.

24. Apparatus as claimed in claim 21, wherein the retrieval means is adapted to retrieve a third indicator word (w_3) from said side information, said third indicator word, when being of a fifth value, indicating that the time equivalent signal blocks all have the same segmentation for the probability tables, and when being of a sixth value, indicating that the time equivalent signal blocks have each a different segmentation for the probability tables, that the retrieval means is further adapted to retrieve first segment information for only one time equivalent signal block in the case that the third indicator word has the fifth value and is adapted to retrieve first segment information for each of the time equivalent signal blocks in the case that the third indicator word has the sixth value, and that the reconverting means is further adapted to copy the first segment information for said one time equivalent signal block n-1 times so as to obtain the M segments of the time equivalent signal blocks of all the n channel signals, in the case that the third indicator word has the fifth value.

25. Apparatus as claimed in claim 21, wherein the retrieval means is adapted to retrieve a fourth indicator word (w_4) from said side information, said fourth indicator word being of a seventh value, indicating that the mapping information for the probability tables is different from the mapping information for the sets of prediction filter coefficients and, when being of an eighth value, indicating that the mapping information for the probability tables is the same as for the prediction filter coefficients, that the retrieval means is further adapted to retrieve only one mapping information from the side information in the latter case, the reconverting means being further adapted to copy the mapping information retrieved in the case that the fourth indicator word has the eighth value.

26. Apparatus as claimed in claim 21, wherein the retrieval means is adapted to retrieve a fifth indicator word (w_5) from said side information, said fifth indicator word, when being of a ninth value, indicating that the time equivalent signal blocks all have the same mapping information for the prediction filter coefficients and, when being of a tenth value, indicating that the time equivalent signal blocks have each a different mapping information for the prediction filter coefficients, that the retrieval means are further adapted to retrieve second mapping information for only one time equivalent signal block in the case that the fifth indicator word has the ninth value and is adapted to retrieve second mapping information for

each of the time equivalent signal blocks in the case that the fifth indicator word has the tenth value.

27. Apparatus as claimed in claim 20 or 21, the retrieval means being further adapted to converting information to retrieve a number code for a time equivalent signal block from said side information, said number code representing the number of segments in said time equivalent signal block.

28. Apparatus as claimed in claim 27, wherein said number code satisfies the following table:

S	code(*S*)
1	1
2	01
3	001
4	0001
s	$0^{(s-1)}1$

where S is the number of segments in a time equivalent signal block of a channel signal.

29. Apparatus as claimed in claim 21, wherein the retrieval means are adapted to retrieve a plurality of sets of prediction filter coefficients from said side information and to retrieve an array of bits from the second mapping information, the apparatus further comprising allocation means for allocating the first set of prediction coefficients to the first of said P segments,

(a) the allocation means further being adapted to allocate the first set of prediction filter coefficients to the second segment in response to the first bit in the array of bits being of a first binary value and being adapted to allocate the second set of prediction filter coefficients to the second segment in response to the first bit being of the second binary value,

(b1) if the first set of coefficients is also the set of filter coefficients for the second segment, then the allocation means is further adapted to allocate to allocate the first set of prediction filter coefficients to the third segment in response to the second bit in the array of bits being of

a first binary value and is adapted to allocate the second set of prediction filter coefficients to the third segment in response to the second bit being of the second binary value,

(b2) if the second set of coefficients is the set of filter coefficients for the second segment, then the allocation means is further adapted to allocate either the first or the second or the third set of prediction filter coefficients to the third segment in response to the values of the next two bits of the array of bits,,

(c1) if the first set of filter coefficients is the set of filter coefficients for the second and third segment, then the allocation means is further adapted to allocate either first or the second set of filter coefficients to the fourth segment in response to the value of the third bit of said array of bits,

(c2) if the first set of prediction filter coefficients is the set of filter coefficients for the second segment and the second set of filter coefficients is the set of filter coefficients for the third segment, then the allocation means is further adapted to allocate either the first, or the second or the third set of prediction filter coefficients to the fourth segment in response to the values of the third and fourth bits in said array of bits,

(c3) if the second set of prediction filter coefficients is the set of filter coefficients for the second segment, and the first or the second set of filter coefficients is the set of filters for the third segment, then the allocation means are adapted to allocate either the first, or second or the third set of filter coefficients to the fourth segment in response to the values of the fourth and fifth bit in the array of bits

(c4) if the second set of prediction filter coefficients is the set of filter coefficients for the second segment, and the third set of filter coefficients is the set of filters for the third segment, then the allocation means are adapted to allocate either the first, or the second, or the third or the fourth set of filter coefficients to the fourth segment in response to the fourth and fifth bit in the array of bits.

30. Apparatus as claimed in claim 20, wherein the retrieval means are adapted to retrieve a plurality of probability tables from said side information and to retrieve an array of bits from the first mapping information, the apparatus further comprising allocation means for allocating the first probability table to the first of said M segments,

(a) the allocation means further being adapted to allocate the first probability table to the second segment in response to the first bit in the array of bits being of a first binary value and being adapted to allocate the second probability table to the second segment in response to the first bit being of the second binary value,

(b1) if the first probability table is also the probability table for the second segment, then the allocation means is further adapted to allocate the first probability table to the third segment in response to the second bit in the array of bits being of a first binary value and is adapted to allocate the second probability table to the third segment in response to the second bit being of the second binary value,

(b2) if the second probability table is the probability table for the second segment, then the allocation means is further adapted to allocate either the first or the second or the third probability table to the third segment in response to the values of the next two bits of the array of bits,

(c1) if the first probability table is the probability table for the second and third segment, then the allocation means is further adapted to allocate either first or the second probability table to the fourth segment in response to the value of the third bit of said array of bits,

(c2) if the first probability table is the probability table for the second segment and the second probability table is the probability table for the third segment, then the allocation means is further adapted to allocate either the first, or the second or the third probability table to the fourth segment in response to the values of the third and fourth bits in said array of bits,

(c3) if the second probability table is the probability table for the second segment, and the first or the second probability table is the probability table for the third segment, then the allocation means are adapted to allocate either the first, or second or the third probability table to the fourth segment in response to the values of the fourth and fifth bit in the array of bits

(c4) if the second probability table is the probability table for the second segment, and the third probability table is the probability table for the third segment, then the allocation means are adapted to allocate either the first, or the second, or the third or the fourth probability table to the fourth segment in response to the fourth and fifth bit in the array of bits.

31. Apparatus as claimed in anyone of the claims 19 to 30, characterized in that said input means comprises reading means for reading the composite information signal from a record carrier.

32. Apparatus as claimed in claim 31, characterized in that said input means further comprises channel decoding and/or error correction means for carrying out a channel decoding step and/or an error correction step on the composite information signal prior to supplying the composite information signal to the retrieval means.

33. Apparatus as claimed in claim 1, the encoding means being adapted to encode time equivalent signal blocks of each of said channel signals of the n-channel information signal, so as to obtain encoded time equivalent signal blocks for each of said signal blocks in response to probability values for each of said signal blocks, the prediction filter means being adapted to carry out a prediction filtering on each of said time equivalent signal blocks in response to said n sets of prediction filter coefficients, one for each time equivalent signal block, the probability table determining means being adapted to generate said n probability tables, one for each time equivalent signal block.

34. Apparatus as claimed in claim 33, wherein the conversion means is adapted to generate a first indicator word (w_4) of a first value, indicating that the mapping information for the probability tables is different from the mapping information for the prediction filter coefficients and of a second value indicating that the mapping information for the probability tables is the same as for the prediction filter coefficients, and for supplying the first or the second mapping information only in the latter case, the combining means being adapted to combine the first indicator word and the first mapping information or the second mapping information only into said composite information signal, in the case that the first indicator word has the second value.

35. Apparatus as claimed in claim 33, wherein the conversion means is adapted to generate a second indicator word (w_5) of a third value indicating that the time equivalent signal blocks all have the same mapping information for the sets of prediction filter coefficients and is adapted to generate a second indicator word of a fourth value indicating that the time equivalent signal blocks have each a different mapping information for the sets of prediction filter coefficients, that the converting means is adapted to generate second mapping information for only one time equivalent signal block in the case that the second indicator word has the third value and is adapted to generate second mapping information for each of the time equivalent signal blocks in the case that the second indicator word has the fourth value, and that the combining means is further adapted to combine the second indicator word into said composite information signal.

36. Apparatus as claimed in claim 33, wherein the first set of prediction filter coefficients is allocated to the first of said n time equivalent signal blocks, said second mapping information being devoid of mapping information for mapping said first set of

prediction filter coefficients to said first time equivalent signal block of said n time equivalent signal blocks,

(a) the first bit in said second mapping information indicating whether the set of prediction filter coefficients for the second time equivalent signal block is the first set of prediction filter coefficients or a second set of prediction filter coefficients,

(b1) if the first set of prediction filter coefficients is also the set of filter coefficients for the second time equivalent signal block, then the second bit in said second mapping information indicating whether the set of prediction filter coefficients for the third time equivalent signal block is the first set of prediction filter coefficients or the second set of prediction filter coefficients,

(b2) if the second set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block, then the next two bits in the second mapping information indicating whether the set of prediction filter coefficients for the third time equivalent signal block is the first, the second or the third set of prediction filter coefficients,

(c1) if the first set of prediction filter coefficients is the set of filter coefficients for the second and third time equivalent signal block, then the third bit of said second mapping information indicates whether the set of prediction filter coefficients for the fourth time equivalent signal block is the first or the second set of prediction filter coefficients,

(c2) if the first set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block and the second set of prediction filter coefficients is the set of filter coefficients for the third time equivalent signal block, then the third and fourth bit in said second mapping information indicating whether the set of prediction filter coefficients for the fourth time equivalent signal block is the first, the second or the third set of prediction filter coefficients,

(c3) if the second set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block, and the first or the second set of filter coefficients is the set of filter coefficients for the third time equivalent signal block, then the fourth and fifth bit in the second mapping information indicating whether the set of prediction filter coefficients for the fourth time equivalent signal block is the first, second or the third set of prediction filter coefficients,

(c4) if the second set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block, and the third set of filter coefficients is the set of prediction filter coefficients for the third time equivalent signal block, then the fourth and fifth bit in the second mapping information indicating whether the set of prediction filter

coefficients for the fourth time equivalent signal block is the first, second, third or the fourth set of filter coefficients.

37. Apparatus as claimed in claim 33, wherein the first probability table is allocated to the first of said n time equivalent signal blocks, said first mapping information being devoid of mapping information for mapping said first probability table to said first time equivalent signal block of said n time equivalent signal blocks,

(a) the first bit in said first mapping information indicating whether the probability table for the second time equivalent signal block is the first probability table or a second probability table,

(b1) if the first probability table is also the probability table for the second time equivalent signal block, then the second bit in said first mapping information indicating whether the probability table for the third time equivalent signal block is the first probability table or the second probability table,

(b2) if the second probability table is the probability table for the second time equivalent signal block, then the next two bits in the first mapping information indicating whether the probability table for the third time equivalent signal block is the first, the second or the third probability table,

(c1) if the first probability table is the probability table for the second and third time equivalent signal block, then the third bit of said first mapping information indicates whether the probability table for the fourth time equivalent signal block is the first or the second probability table,

(c2) if the first probability table is the probability table for the second time equivalent signal block and the second probability table is the probability table for the third time equivalent signal block, then the third and fourth bit in said first mapping information indicating whether the probability table for the fourth time equivalent signal block is the first, the second or the third probability table,

(c3) if the second probability table is the probability table for the second time equivalent signal block, and the first or the second probability table is the probability table for the third time equivalent signal block, then the fourth and fifth bit in the first mapping information indicating whether the probability table for the fourth time equivalent signal block is the first, second or the third probability table,

(c4) if the second probability table is the probability table for the second time equivalent signal block, and the third probability table is the probability table for the third time equivalent signal

block, then the fourth and fifth bit in the first mapping information indicating whether the probability table or the fourth time equivalent signal block is the first, second, third or the fourth probability table.

38. Apparatus as claimed in claim 19, wherein said decoding means are adapted to decode the encoded data information into n time equivalent signal blocks, one for each of the n channel signals, the retrieval means being adapted to retrieve a first indicator word (w_4) from said side information, said first indicator word being of a first value, indicating that the mapping information for the probability tables is different from the mapping information for the sets of prediction filter coefficients and, when being of a second value, indicating that the mapping information for the probability tables is the same as for the prediction filter coefficients, that the retrieval means is further adapted to retrieve only one mapping information from the side information in the latter case, the reconverting means being further adapted to copy the mapping information retrieved in the case that the first indicator word has the eighth value.

39. Apparatus as claimed in claim 19, wherein said decoding means are adapted to decode the encoded data information into n time equivalent signal blocks, one for each of the n channel signals, the retrieval means being adapted to retrieve a second indicator word (w_5) from said side information, said second indicator word, when being of a third value, indicating that the time equivalent signal blocks all have the same mapping information for the prediction filter coefficients and, when being of a fourth value, indicating that the time equivalent signal blocks have each a different mapping information for the prediction filter coefficients, that the retrieval means are further adapted to retrieve second mapping information for only one time equivalent signal block in the case that the fifth indicator word has the third value and is adapted to retrieve second mapping information for each of the time equivalent signal blocks in the case that the fifth indicator word has the fourth value.

40. Apparatus as claimed in claim 19, wherein said decoding means are adapted to decode the encoded data information into n time equivalent signal blocks, one for each of the n channel signals, the retrieval means being adapted to retrieve a plurality of sets of prediction filter coefficients from said side information and to retrieve an array of bits from the second mapping information, the apparatus further comprising allocation means for allocating the first set of prediction coefficients to the first of said n time equivalent signal blocks,

(a) the allocation means further being adapted to allocate the first set of prediction filter coefficients to the second time equivalent signal block in response to the first bit in the array of bits being of a first binary value and being adapted to allocate the second set of prediction filter coefficients to the second time equivalent signal block in response to the first bit being of the second binary value,

(b1) if the first set of coefficients is also the set of filter coefficients for the second time equivalent signal block, then the allocation means is further adapted to allocate to allocate the first set of prediction filter coefficients to the third time equivalent signal block in response to the second bit in the array of bits being of a first binary value and is adapted to allocate the second set of prediction filter coefficients to the third time equivalent signal block in response to the second bit being of the second binary value,

(b2) if the second set of coefficients is the set of filter coefficients for the second time equivalent signal block, then the allocation means is further adapted to allocate either the first or the second or the third set of prediction filter coefficients to the third time equivalent signal block in response to the values of the next two bits of the array of bits,,

(c1) if the first set of filter coefficients is the set of filter coefficients for the second and third time equivalent signal block, then the allocation means is further adapted to allocate either first or the second set of filter coefficients to the fourth time equivalent signal block in response to the value of the third bit of said array of bits,

(c2) if the first set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block and the second set of filter coefficients is the set of filter coefficients for the third time equivalent signal block, then the allocation means is further adapted to allocate either the first, or the second or the third set of prediction filter coefficients to the fourth time equivalent signal block in response to the values of the third and fourth bits in said array of bits,

(c3) if the second set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block, and the first or the second set of filter coefficients is the set of filters for the third time equivalent signal block, then the allocation means are adapted to allocate either the first, or second or the third set of filter coefficients to the fourth time equivalent signal block in response to the values of the fourth and fifth bit in the array of bits

(c4) if the second set of prediction filter coefficients is the set of filter coefficients for the second time equivalent signal block, and the third set of filter coefficients is the set of filters for the third time equivalent signal block, then the allocation means are adapted to allocate

either the first, or the second, or the third or the fourth set of filter coefficients to the fourth time equivalent signal block in response to the fourth and fifth bit in the array of bits.

41. Apparatus as claimed in claim 19, wherein said decoding means are adapted to decode the encoded data information into n time equivalent signal blocks, one for each of the n channel signals, the retrieval means being adapted to retrieve a plurality of probability tables from said side information and to retrieve an array of bits from the first mapping information, the apparatus further comprising allocation means for allocating the first probability table to the first of said n time equivalent signal blocks,

(a) the allocation means further being adapted to allocate the first probability table to the second time equivalent signal block in response to the first bit in the array of bits being of a first binary value and being adapted to allocate the second probability table to the second time equivalent signal block in response to the first bit being of the second binary value,

(b1) if the first probability table is also the probability table for the second time equivalent signal block, then the allocation means is further adapted to allocate the first probability table to the third time equivalent signal block in response to the second bit in the array of bits being of a first binary value and is adapted to allocate the second probability table to the third time equivalent signal block in response to the second bit being of the second binary value,

(b2) if the second probability table is the probability table for the second time equivalent signal block, then the allocation means is further adapted to allocate either the first or the second or the third probability table to the third time equivalent signal block in response to the values of the next two bits of the array of bits,

(c1) if the first probability table is the probability table for the second and third time equivalent signal block, then the allocation means is further adapted to allocate either first or the second probability table to the fourth time equivalent signal block in response to the value of the third bit of said array of bits,

(c2) if the first probability table is the probability table for the second time equivalent signal block and the second probability table is the probability table for the third time equivalent signal block, then the allocation means is further adapted to allocate either the first, or the second or the third probability table to the fourth time equivalent signal block in response to the values of the third and fourth bits in said array of bits,

(c3) if the second probability table is the probability table for the second time equivalent signal block, and the first or the second probability table is the probability table for the third time equivalent signal block, then the allocation means are adapted to allocate either the first, or

second or the third probability table to the fourth time equivalent signal block in response to the values of the fourth and fifth bit in the array of bits

(c4) if the second probability table is the probability table for the second time equivalent signal block, and the third probability table is the probability table for the third time equivalent signal block, then the allocation means are adapted to allocate either the first, or the second, or the third or the fourth probability table to the fourth time equivalent signal block in response to the fourth and fifth bit in the array of bits.